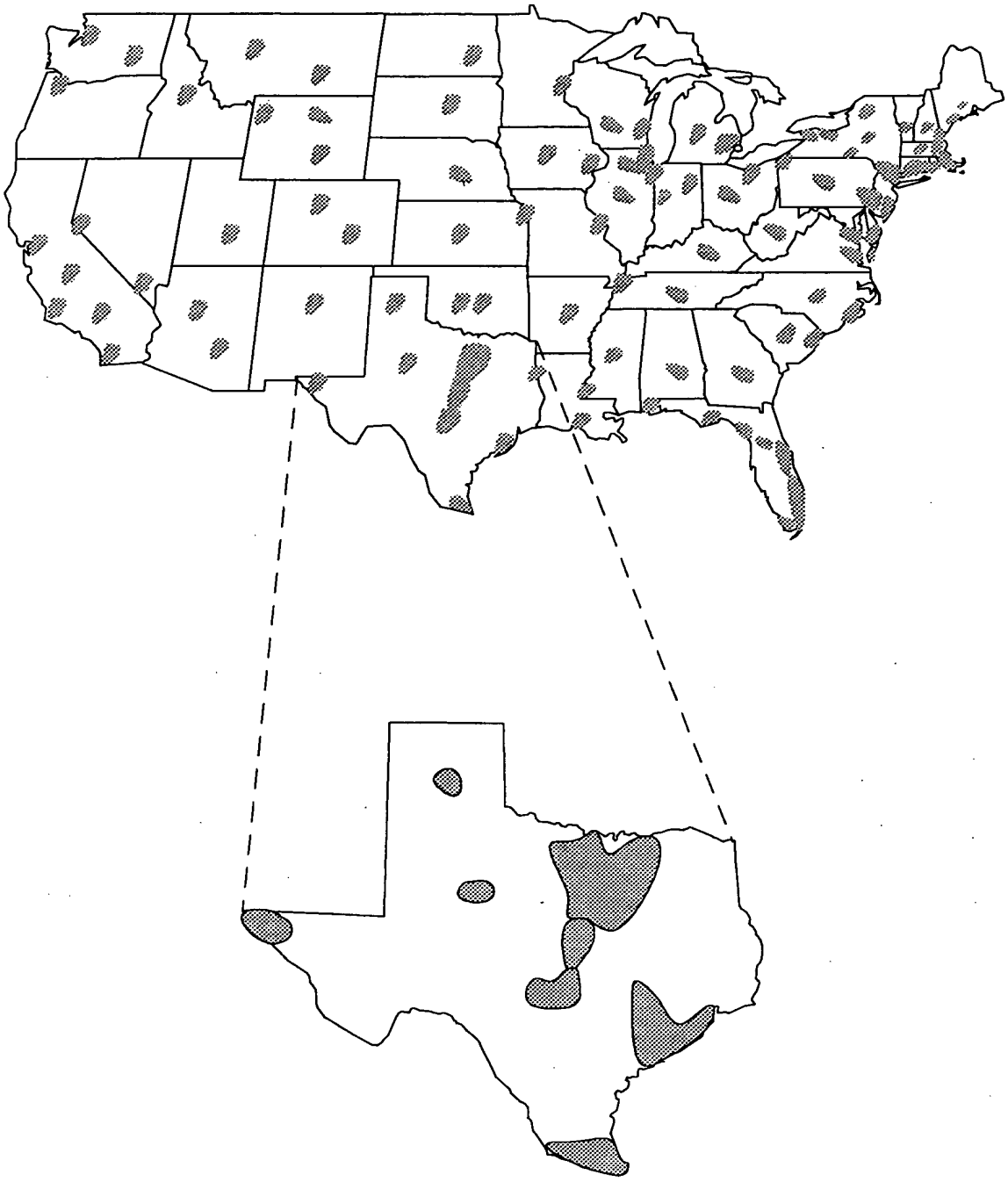


= Coverage From Regional Transmission System(s)

Fig. 2

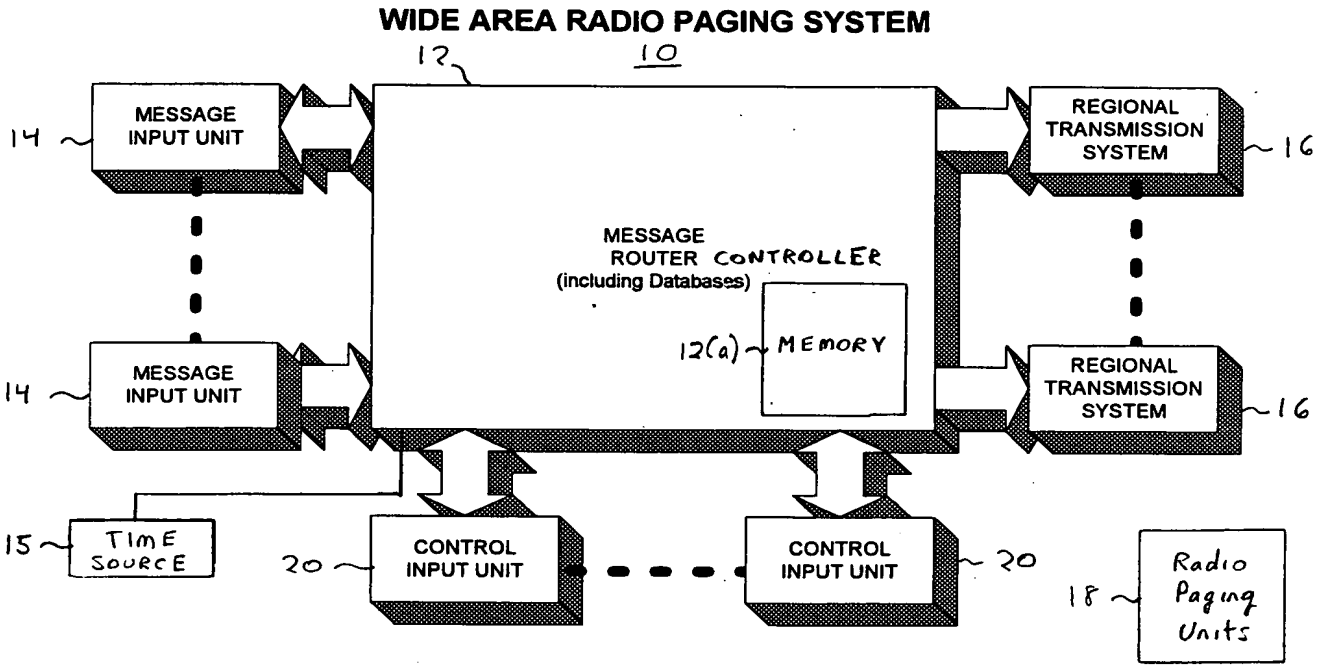

WIDE AREA RADIO PAGING SYSTEM
12
10
MESSAGE INPUT UNIT
14
MESSAGE INPUT UNIT
14
MESSAGE ROUTER CONTROLLER
(including Databases)
12(a)
MEMORY
REGIONAL TRANSMISSION SYSTEM
16
REGIONAL TRANSMISSION SYSTEM
16
15
TIME SOURCE
20
CONTROL INPUT UNIT
CONTROL INPUT UNIT
20
18
Radio Paging Units

Fig. 1

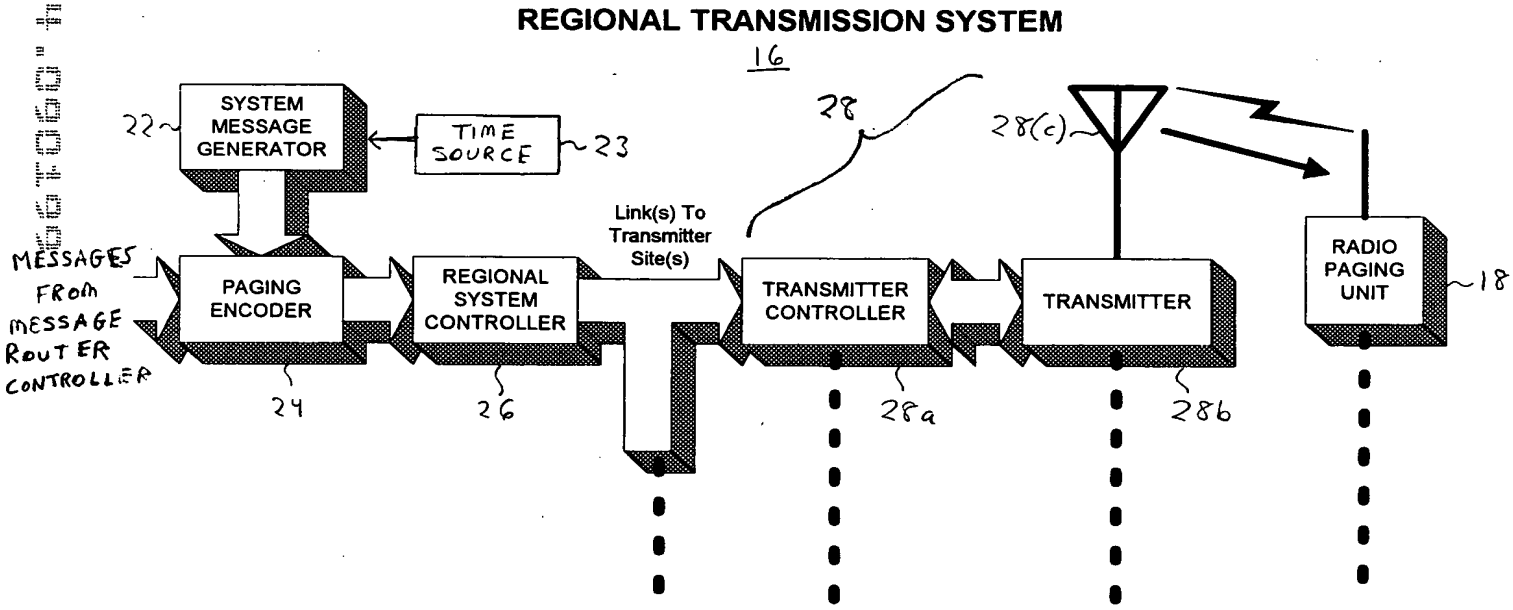

REGIONAL TRANSMISSION SYSTEM
16
22
SYSTEM MESSAGE GENERATOR
TIME SOURCE
23
28
28(c)
Link(s) To Transmitter Site(s)
MESSAGES FROM MESSAGE ROUTER CONTROLLER
PAGING ENCODER
REGIONAL SYSTEM CONTROLLER
TRANSMITTER CONTROLLER
TRANSMITTER
RADIO PAGING UNIT
18
24
26
28a
28b

Fig. 3

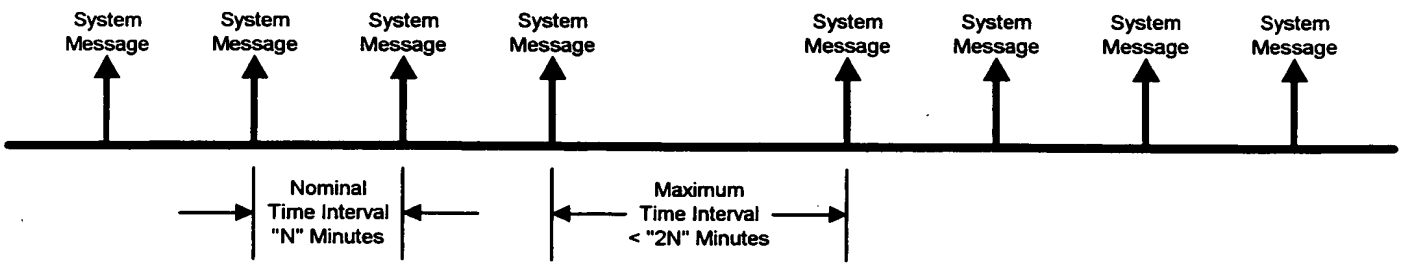


Fig. 4

SYSTEM MESSAGE

Regional System ID (RegID)
System Time (SysTime)
Regional Control Input Access Number (AccessNumber)

Fig. 5

REGIONAL SYSTEM ID (RegID)

Regional System ID (RegID)	System ID (SID) + Regional ID (RID) + Frequency ID (FID)		
RegID = SID + RID + FID	SID	RID	FID

Bit Positions →	19			16	15			12	11			8	7			4	3			0
SIDMask = 1040384 52	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
RIDMask = 8176 54	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0
FIDMask = 15 56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
Sum Of Masks = All Ones	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
RegID = 8289	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	1
SID = 8192	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
RID = 96	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
FID = 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Fig. 6

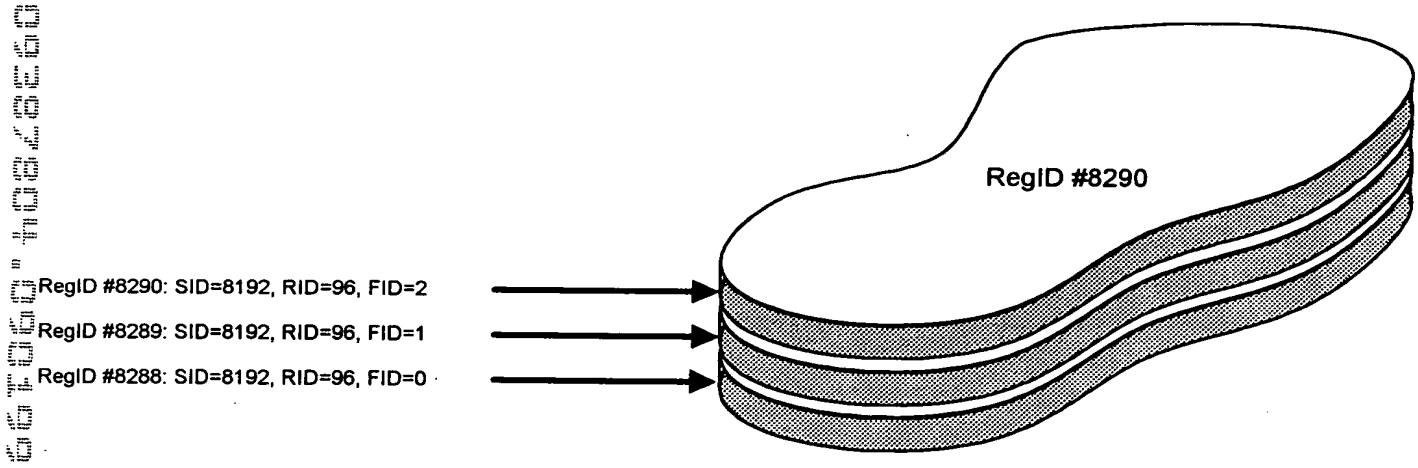


Fig. 7

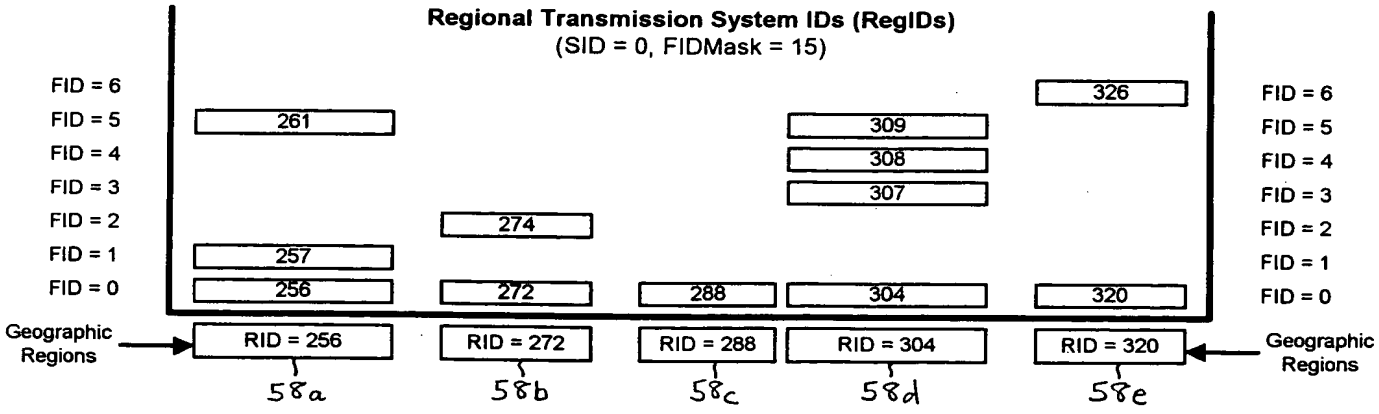


Fig. 8

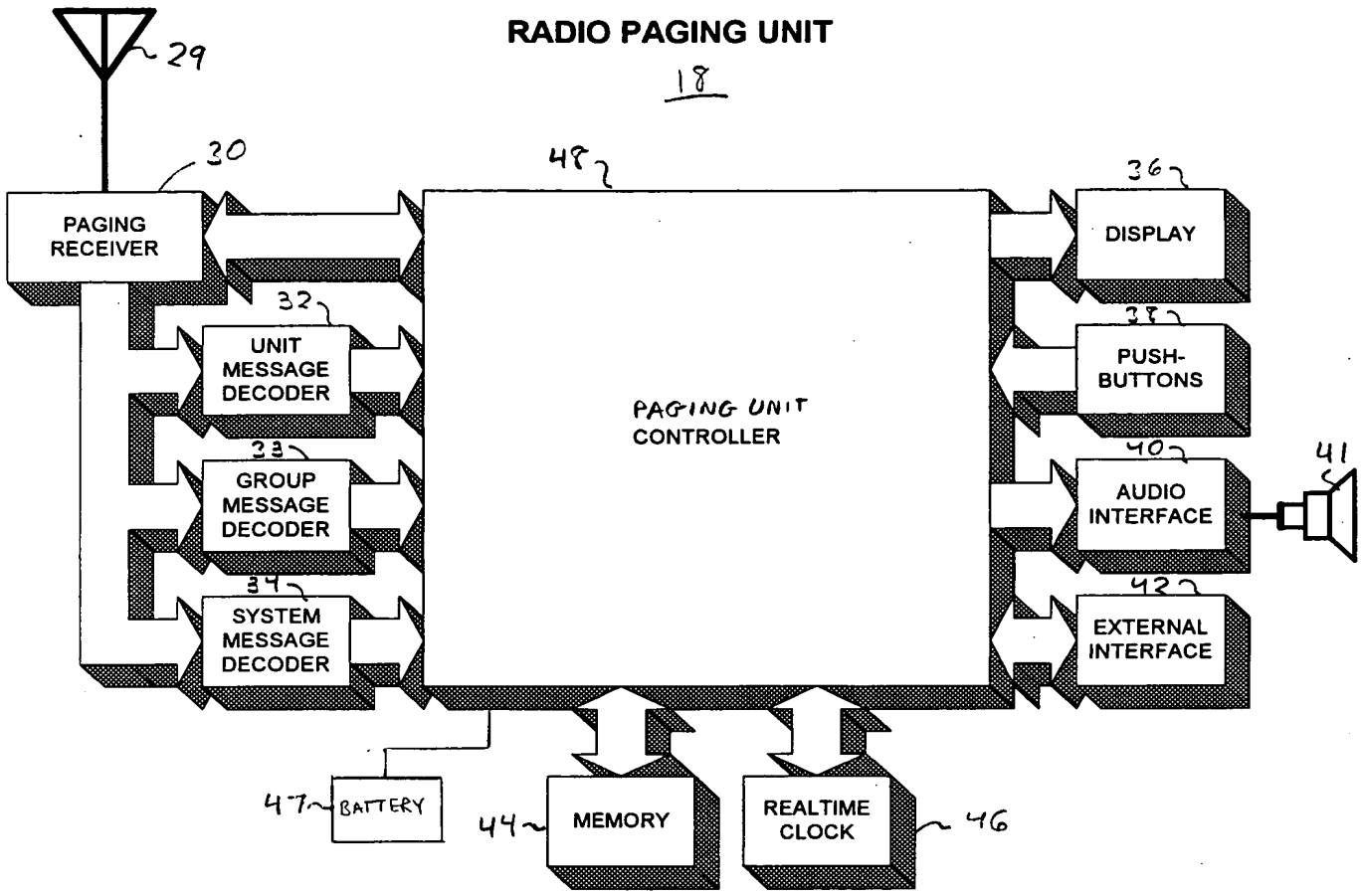

RADIO PAGING UNIT
18
29
30
48
36
PAGING RECEIVER
DISPLAY
32
UNIT MESSAGE DECODER
38
PUSH-BUTTONS
PAGING UNIT CONTROLLER
33
GROUP MESSAGE DECODER
40
41
AUDIO INTERFACE
34
SYSTEM MESSAGE DECODER
42
EXTERNAL INTERFACE
47
BATTERY
44
MEMORY
REALTIME CLOCK
46

Fig. 9

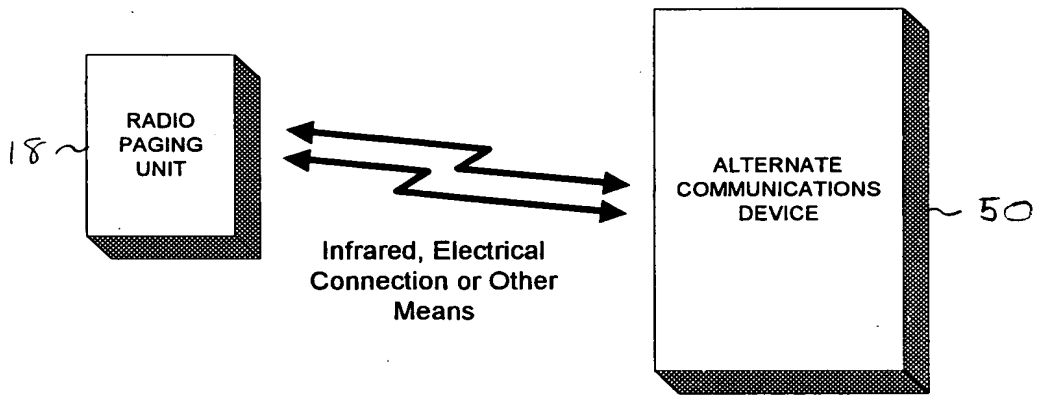

18
RADIO PAGING UNIT
Infrared, Electrical Connection or Other Means
ALTERNATE COMMUNICATIONS DEVICE
50

Fig. 10

CONFIRMATION MESSAGE (Message Addressed To UnitID)

Regional System ID (RegID)

Fig. 11

Reception Of System Messages When Moving Between Regional Transmission Systems

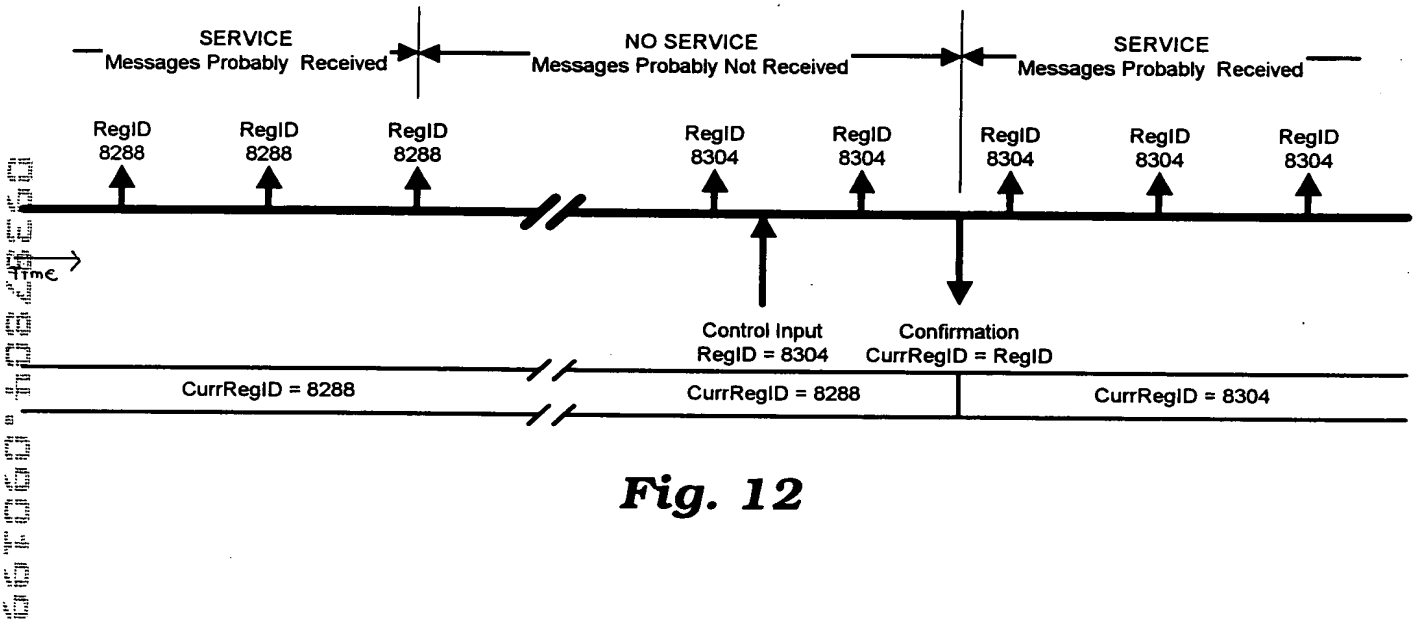


Fig. 12

Reception Of System Messages When Moving Out Of And Back Into A Regional Transmission System

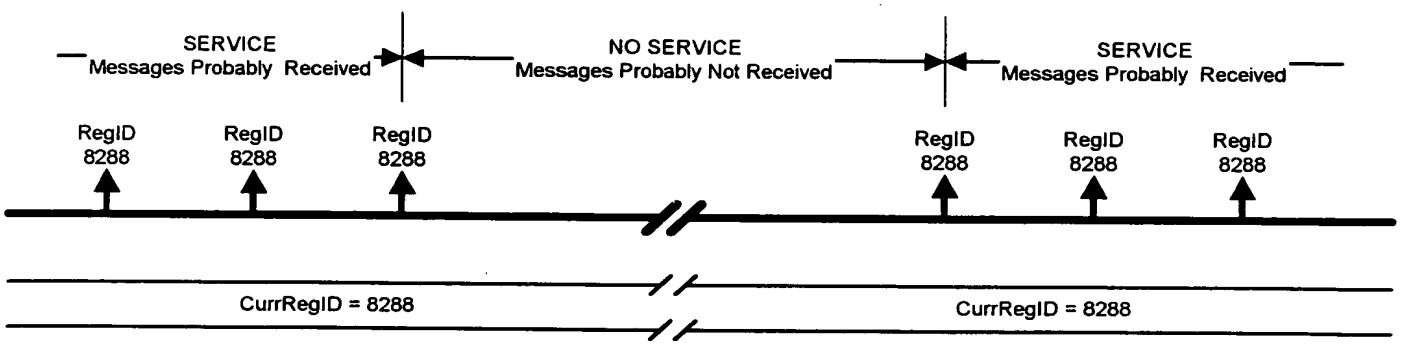


Fig. 13

NoSrvc MEMORY ARRAY

	No Service Memory Array Index (NoSrvcIndex)	
Element #0	Beginning Time (Begin)	Ending Time (End)
Element #1	Beginning Time (Begin)	Ending Time (End)
Element #2	Beginning Time (Begin)	Ending Time (End)

Fig. 14

CONTROL INPUT INFORMATION (Automatic or Semi-Automatic)

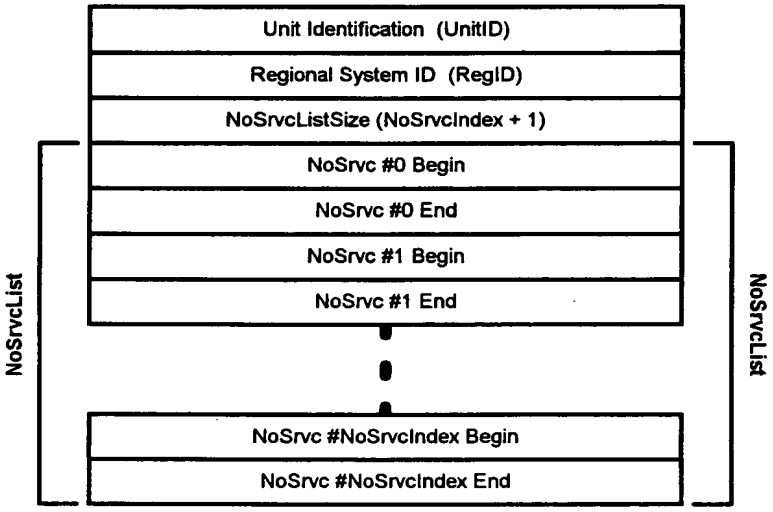


Fig. 15

CONTROL INPUT INFORMATION (Manual)

Unit Identification (UnitID)
Regional System ID (RegID)
NumberOfHoursToRetransmit

NumberOfHoursToRetransmit = NoSrvc #NoSrvcIndex End - NoSrvc #0 Begin

Fig. 16

ROUTING DATABASE

	MsgInID	GroupFlg	GroupID/UnitID	RegID
Unit #1	MsgInID #1	GroupFlg	GroupID/UnitID for MsgInID #1	Current RegID for MsgInID #1
Unit #2	MsgInID #2	GroupFlg	GroupID/UnitID for MsgInID #1	Current RegID for MsgInID #2
Unit #3	MsgInID #3	GroupFlg	GroupID/UnitID for MsgInID #1	Current RegID for MsgInID #3

Fig. 17

MESSAGE DATABASE

	UnitID	Msg	Time
Message #1	UnitID	This Message	Time Message Sent
Message #2	UnitID	This Message	Time Message Sent
Message #3	UnitID	This Message	Time Message Sent

Fig. 18

GROUP DATABASE

GroupID	GroupList
GroupID #1	Variable Length List Of UnitIDs In This Group
GroupID #2	Variable Length List Of UnitIDs In This Group
GroupID #3	Variable Length List Of UnitIDs In This Group

Fig. 19

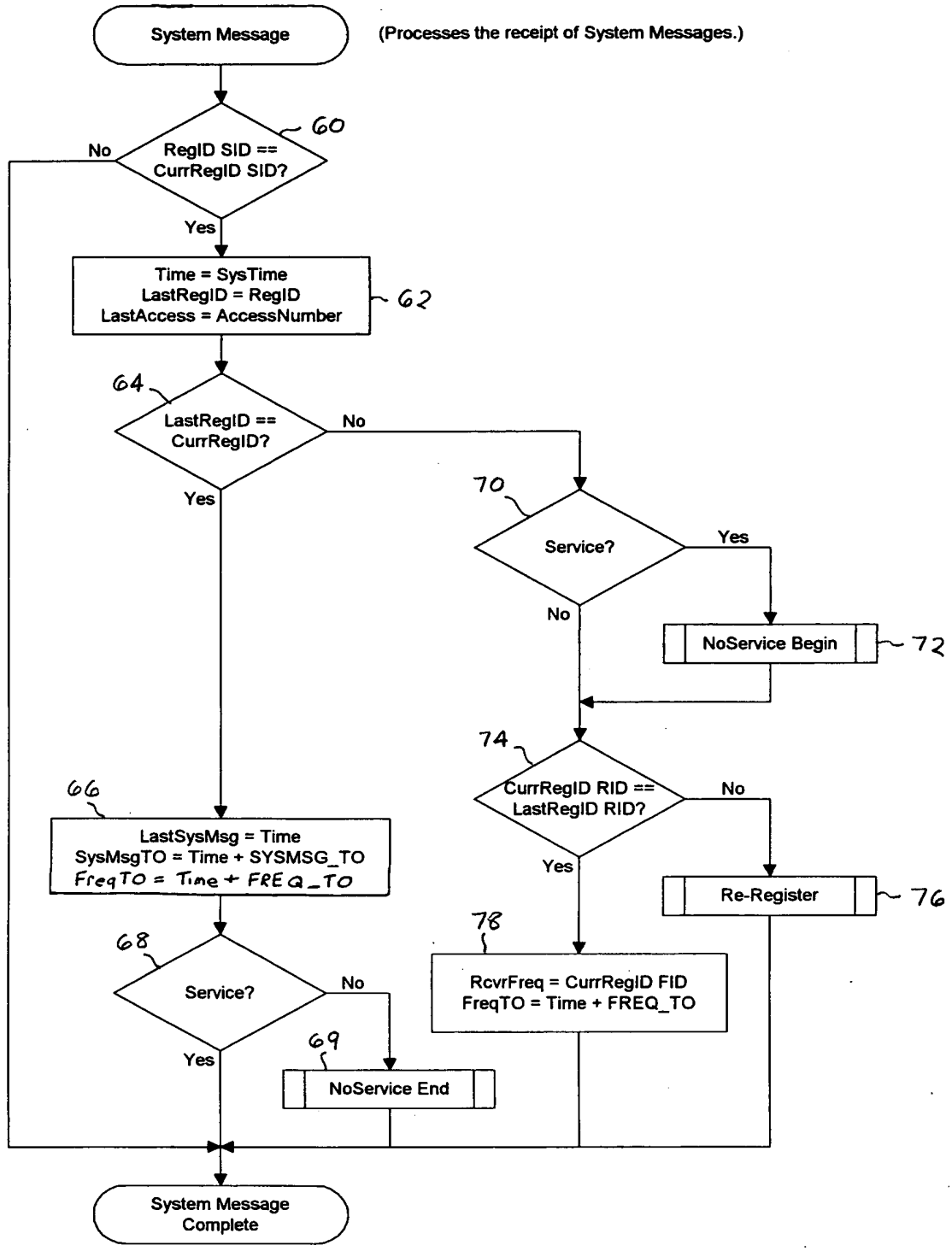

System Message
(Processes the receipt of System Messages.)
60
RegID SID == CurrRegID SID?
No
Yes
Time = SysTime
LastRegID = RegID
LastAccess = AccessNumber
62
64
LastRegID == CurrRegID?
No
Yes
70
Service?
Yes
No
NoService Begin
72
74
CurrRegID RID == LastRegID RID?
No
Yes
Re-Register
76
66
LastSysMsg = Time
SysMsgTO = Time + SYSMSG_TO
FreqTO = Time + FREQ_TO
68
Service?
No
Yes
69
NoService End
78
RcvrFreq = CurrRegID FID
FreqTO = Time + FREQ_TO
System Message Complete

Fig. 20

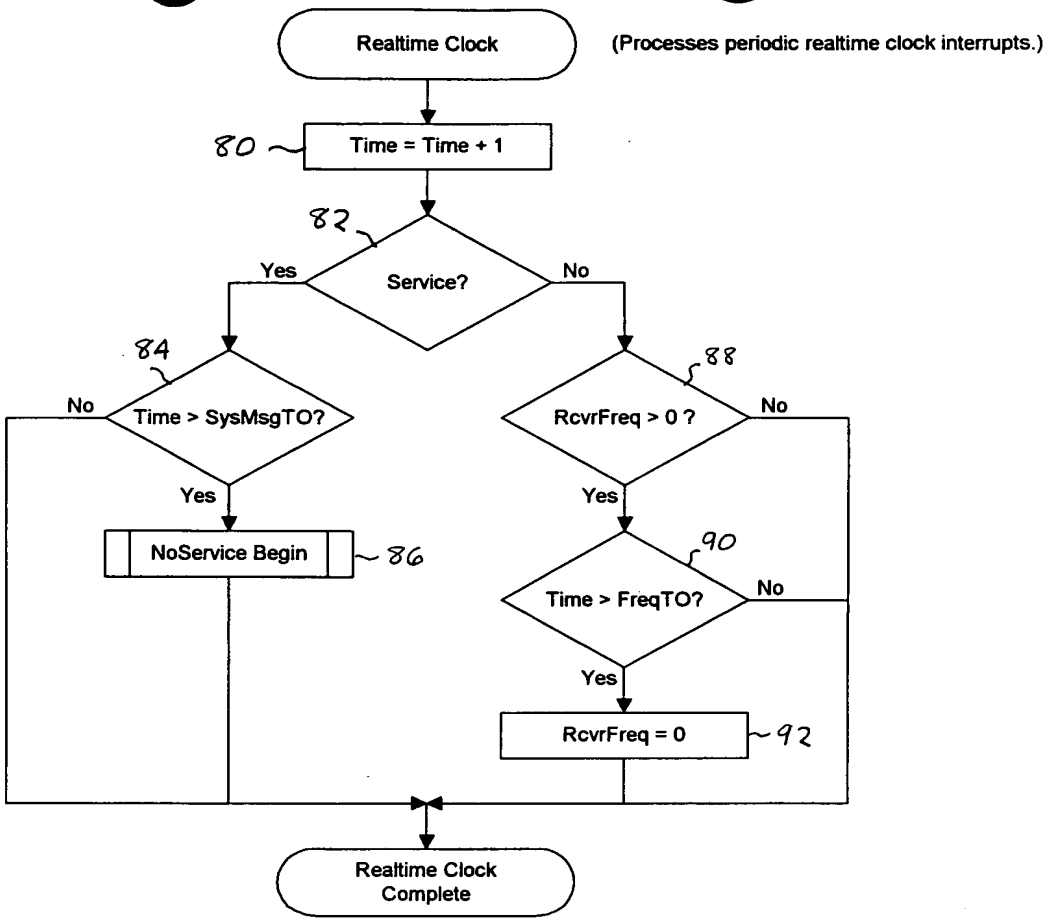


Fig. 21

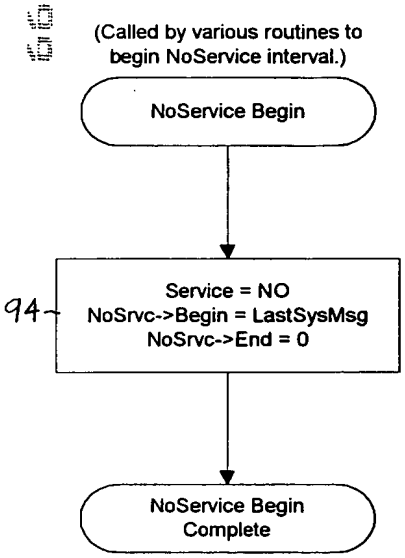


Fig. 22

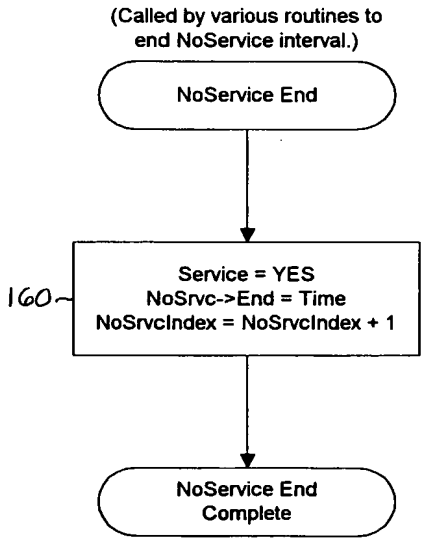


Fig. 23

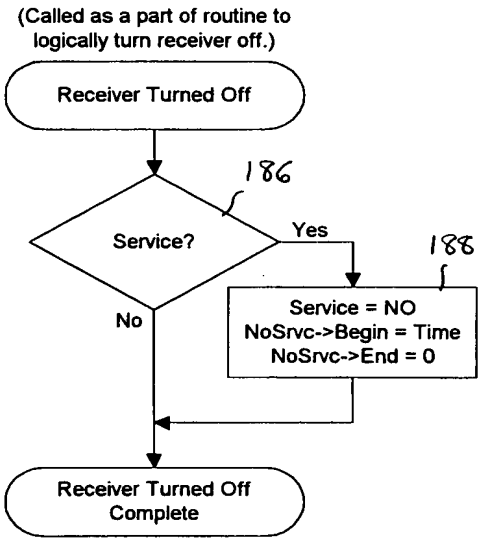


Fig. 24

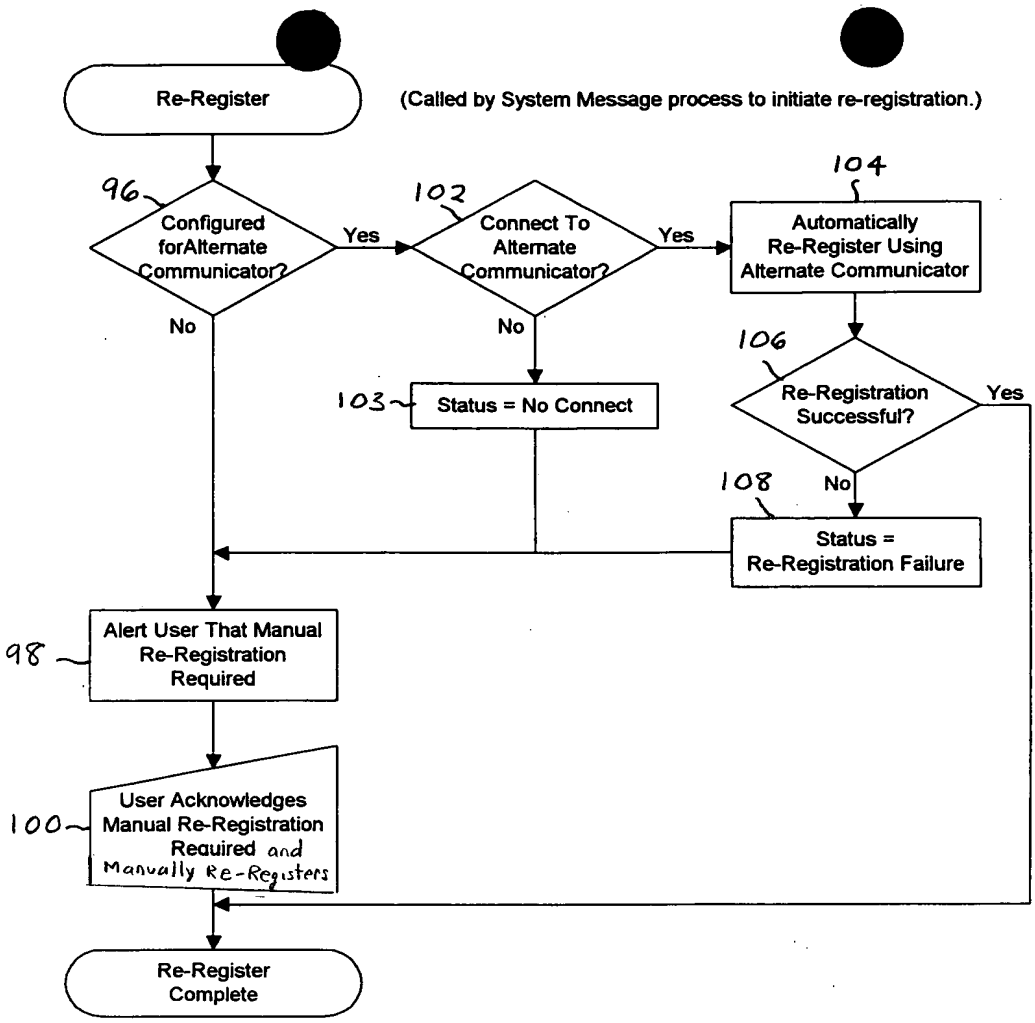

Re-Register
(Called by System Message process to initiate re-registration.)
96
Configured forAlternate Communicator?
Yes
No
102
Connect To Alternate Communicator?
Yes
No
104
Automatically Re-Register Using Alternate Communicator
103
Status = No Connect
106
Re-Registration Successful?
Yes
No
108
Status = Re-Registration Failure
98
Alert User That Manual Re-Registration Required
100
User Acknowledges Manual Re-Registration Required and Manually Re-Registers
Re-Register Complete

Fig. 25

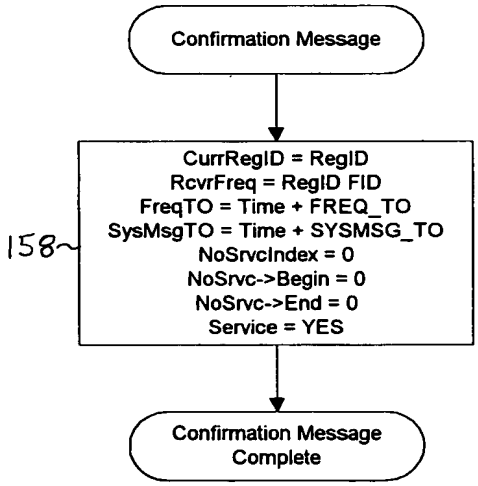

Confirmation Message
158
CurrRegID = RegID
RcvrFreq = RegID FID
FreqTO = Time + FREQ_TO
SysMsgTO = Time + SYSMSG_TO
NoSrvcIndex = 0
NoSrvc->Begin = 0
NoSrvc->End = 0
Service = YES
Confirmation Message Complete

Fig. 26

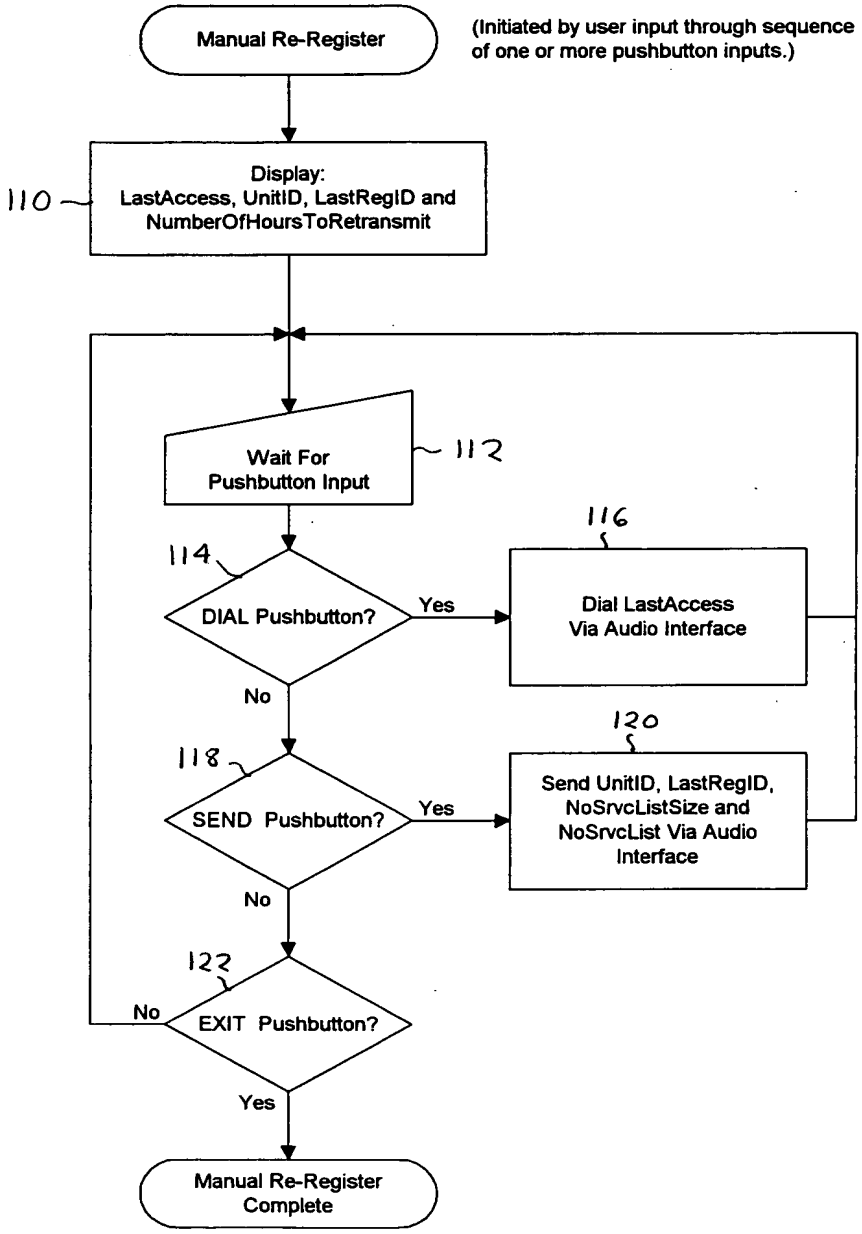

Manual Re-Register
(Initiated by user input through sequence of one or more pushbutton inputs.)
110
Display:
LastAccess, UnitID, LastRegID and NumberOfHoursToRetransmit
Wait For Pushbutton Input
112
114
DIAL Pushbutton?
Yes
116
Dial LastAccess Via Audio Interface
No
118
SEND Pushbutton?
Yes
120
Send UnitID, LastRegID, NoSrvcListSize and NoSrvcList Via Audio Interface
No
122
No
EXIT Pushbutton?
Yes
Manual Re-Register Complete

Fig. 27

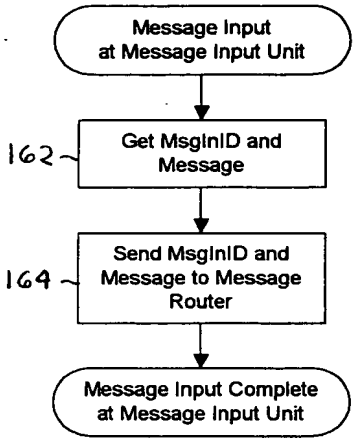


Fig. 28a

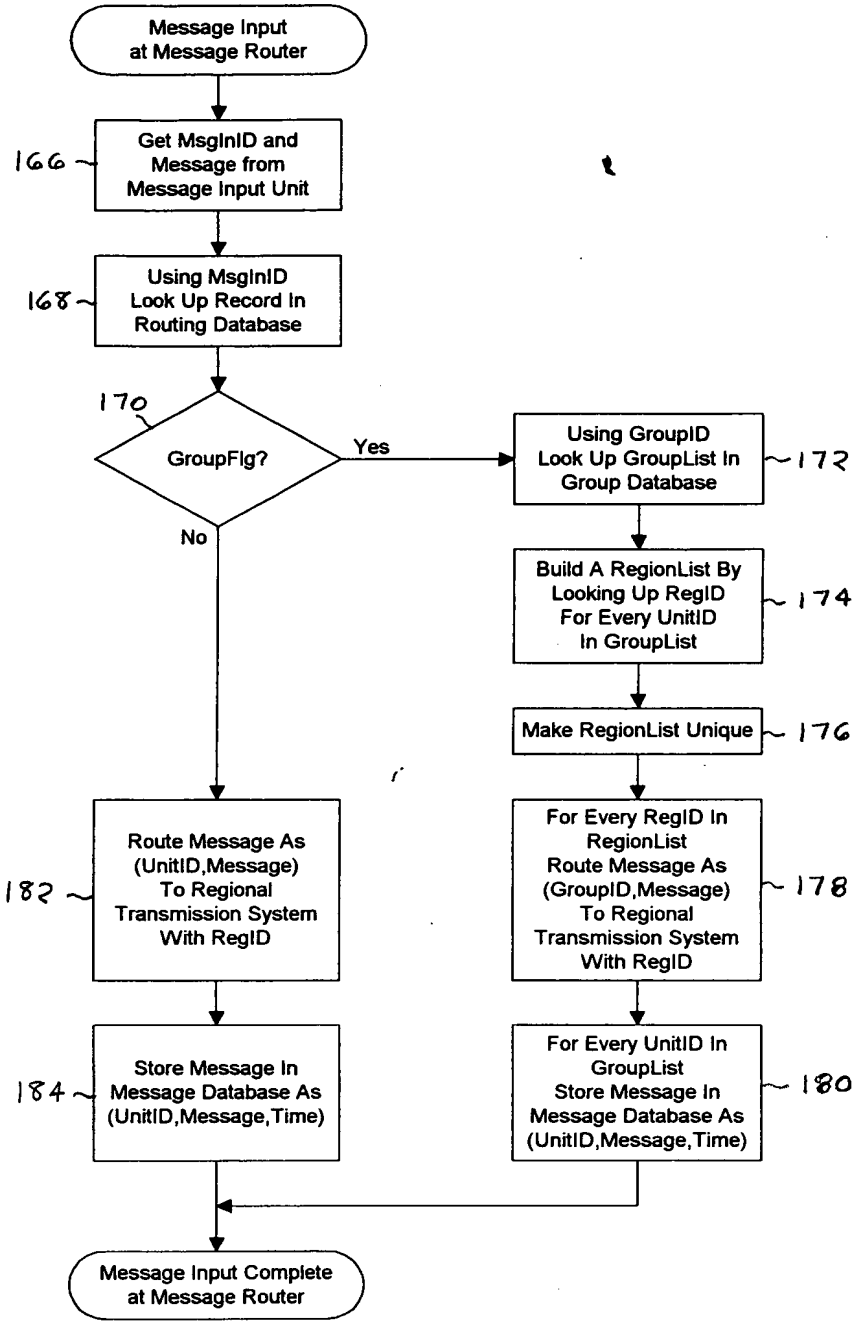


Fig. 28b

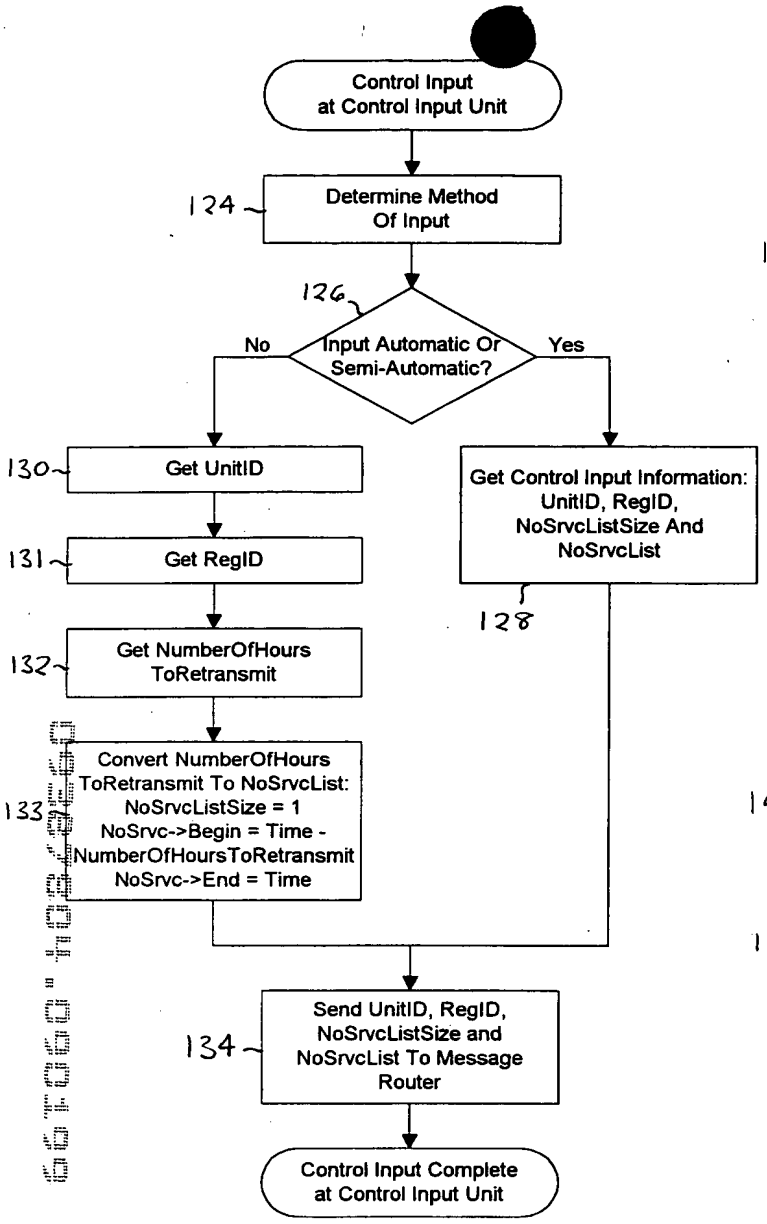


Fig. 29a

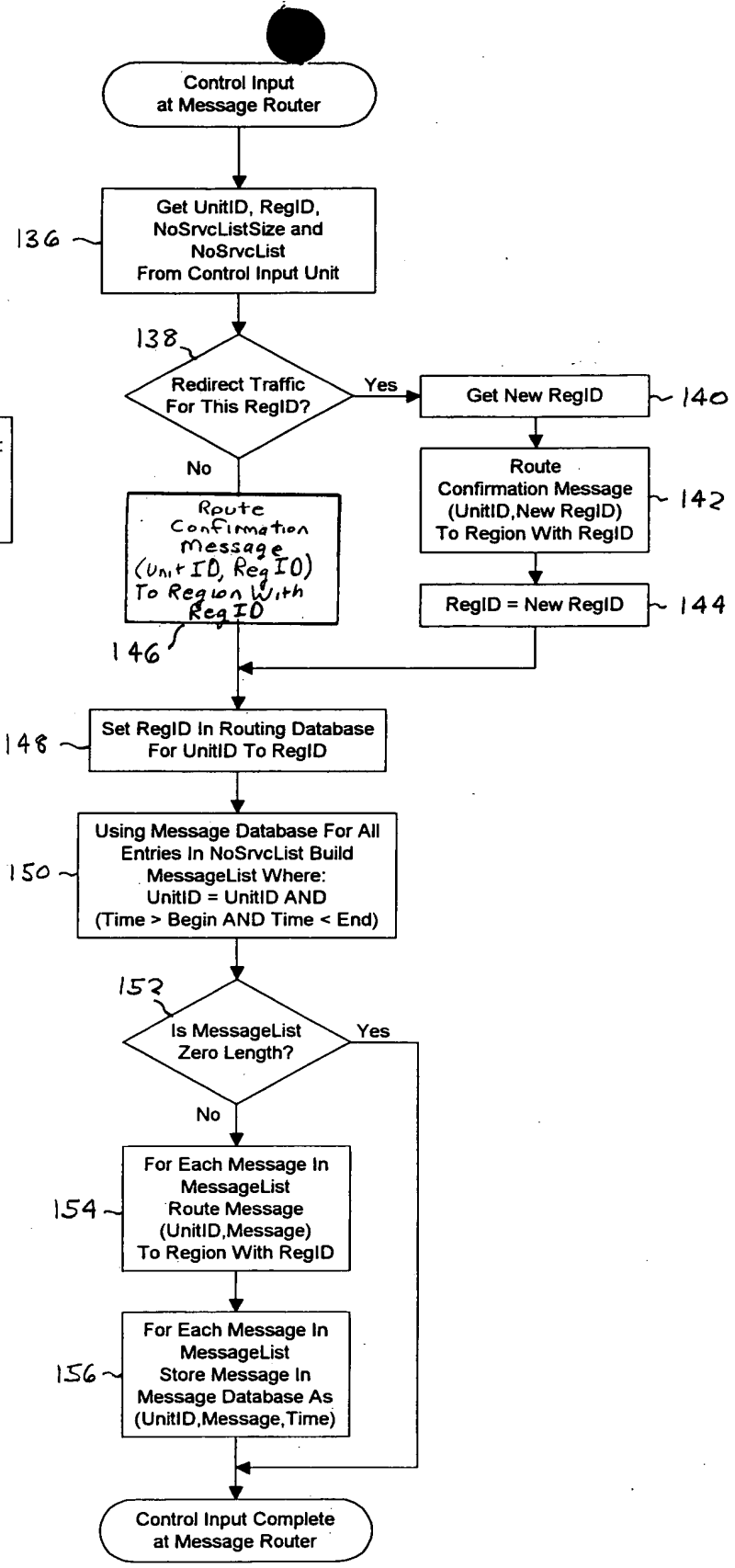


Fig. 29b